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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,315	08/18/2001	David Ge		2625
29390	7590	10/06/2004		
DAVID GE 10218 125TH AVE. NE KIRKLAND, WA 98033			EXAMINER CHAVIS, JOHN Q	
			ART UNIT 2124	PAPER NUMBER

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/682,315	<b>Applicant(s)</b> GE, DAVID	
	<b>Examiner</b> John Chavis	<b>Art Unit</b> 2124	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### ***Drawings***

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the lines are unevenly dark and well defined and the point size is too small, for example, see figs. 9 and 23. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it is longer than 150 words. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 112***

Art Unit: 2124

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-5, 6 and 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims should end with a period (.). However, claim 1 (for example) ends with a semicolon. Claims 2-5, 7 and 8 have problems similar to claim 1. Therefore, it is not clear if the claim is intended to end at that point or if something else is to follow. In reference to claim 9, the claim appears to refer to one of the "above" claims. However, it is not clear which one it references; since, the claim indicates "the method of **above claim** further comprising..." Therefore, it is not clear which claim it is dependent on. Also, in reference to claim 5, steps D, E, and F are non-existent; since, they are not provided for in claim 1 and not previously mentioned in claim 5. Therefore, it is not clear what is intended. Claims 6 and 7 have the same type of problems as claim 5.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patel and further in view of Budd and further in view of the applicant's choice of sorting a list of items to display.

US-CL-CURRENT: 717/113

CLAIMS:

1. A method for creating an application program, the method implemented on a computer system having persistent storage,

a display screen and one or more input devices,

the input devices controllable by a user to create visual representations on the display screen,

the method comprising  
A. defining and supporting a set of pre-developed object classes, the said pre-developed object classes are all derived from one generic class which supports a property-method-event model;

Patel/Budd/choice of sorting list

Each of the references provide for creating an application. Patel indicates it via pages 265-268. The persistent storage is illustrated via the stored functions and properties available for modification in figure 15.1.

See again fig. 15.1 and the feature that enables the selections provides for input.

See the last paragraph of page 265 and note that Patels GUI provides for visual representation. Also, the paragraph inherently provides for an input device to enable functions to be started, stopped and changed.

The Toolbox in the last paragraph of page 266 provides for the pre-developed object classes. The one generic class in Java is the Object class, see page 126 of the attached Linden reference, which is merely cited to provide a definition of objects.

Note in the last paragraph that Linden indicates that “ Object” is a superclass of all other classes in the system (generic).

defining an action class and an action list class; the action class has, as its members, action performer, action method, and action data;

Patel does not specifically indicate action classes and action lists specifically. However, the features are taught by Budd to enable interfaces and user interactions, see page 91 (the actionPerformed and ActionListener methods, the FirebuttonListener class on page 92 and the data that supports each). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the feature for the same reasons in Patels system to enable dynamic user interactions, see the last two paragraphs of page 89. The action list class is considered taught via Budds menu items on pages 227-231 implemented like containers. The menu items are provided to simplify user selections and therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the feature in Patels system for the same reason.

the action list class contains a  
sorted list of action class instances;

Budds list or menu items are not listed as sorted; however, it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a sorted list to Patels system to enable users to visually locate selections faster.

the action performer is one of the  
pre-developed object class;

ActionListener functions as the action performer class; since, it must implement the actionPerformed method, see Budds section 6.2.2. The class is pre developed with it inherent constraints as indicated above and in section 6.2.2.

the action method is one of the methods  
supported by the action performer;

See again section 6.2.2, which provides for the actionPerformed method (action method).

the action data are the parameters  
needed by the action method;

See the ActionEvent data required by the actionPerformed method in sect. 6.2.2.

B. generating and graphically displaying,  
in response to input from the user,  
instances of the object classes from the  
said pre-developed object classes;

See the instances displayed on page Budds 212, as an example and specifically see Patels fig. 15.1.

C. setting, in response to input from the user, each property of each instance of the object classes created in step B;

See Patels figs. 15.1-15.4 for the property setting feature.

2. The method of claim 1 further comprising the step of: D. creating, in response to input from the user, instances of the action list class which contains a sorted list of instances of the action class;

See the rejection of claim 1.

wherein step D comprises

See Patels figs. 15.1-15.4.

D1. Creating, in response to input from the user, each action class instance of each action list class instance; and

Wherein step D1 comprises:

“ “ “ “

D1a. Selecting an instance of object class from the instances of object classes created in step B; the said selected instance of object class is used as the action performer member for the action class instance;

D1b. selecting a method from the methods supported by the instance of object class selected in step D1a;

“ “ “ “



the selected method is used as the action method for the action class instance;

D1c. according to the method selected in step D1b, it is known the number and types of the parameters needed for the said method; if one or more parameters are needed for the said method, then one or more dialog-boxes are provided for the user to specify the appropriate parameters for the method;

3. The method of claim 1 further comprising the step of E. linking, in response to input from the user, action list instances created in step D to events of the instances of the object classes to form an event-action-list mapping;

Wherein step E comprises:

E1. Selecting, in response to input from the user, an instance of object class from the existing instances of object classes;

“ “ “ “

The feature is not specifically indicated by Patel; however, see Budds fig. 13.5. Budd utilizes the feature to enable the user to know what input is required or supported. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to utilize the feature in Patels system for the same reasons.

See Patels fig. 15.7.

See Patels fig. 15.15.

E2. Selecting, in response to input from the user, an event from the events supported by the object class instance selected in step E1;

“ “ “ “

E3. Selecting, in response to input from the user, an action list class instance from the action list class instances created in step 2;

See fig. 15.9 in view of fig. 15.6.

E4. Building the mapping relationship between the action-list selected in step E3 and the event selected in step E2;

See again figs. 15.6 and 15.7.

4. The method of claim 1 further comprising the step of: F. Selecting, in response to input from the user, a set of object class instances to be specified as the "initially active object class instances" usually the object class instances presented on the first application screen presentation is such a set of the "initially active object class instances"

See fig. 15.6 and note that either start, stop or neither has to initially be set to active.

5. The method of claim 1 further comprising the step G. saving to the computer persistent storage the

This claim is so unclear that the features not supported are not entitled patentable weight.

object class instances created in steps A, B and C, the action list class instances created in step D, the mapping relationship built in step E between the events of object class instances and the action lists, indication of which object instances are the "initially active object class instances" as specified in step F;

Therefore, the claim is rejected as claim 1.

6. The method of claim 1 further comprising the step of: H. an execution environment; Wherein step H comprises: H1. Reading back from the computer persistent storage the object class instances created in steps A, B and C, the action lists created in step D, the mapping relationship built in step E between the events of the object class instances and the action list, indication of which object instances are the "initially active object class instances" as specified in step F; H2. Creating and displaying the said "initially active object class instances"; H3. Responding to each event fired by each object class instance; Wherein step H3 comprises: H3a. Checking if there is a mapping relationship between an action list class instance and the said event; H3b. If the

See the rejection of claim 5 above.

said mapping relationship exists, sequentially performing each action in the said action list mapped to the said event; H3c. Each action in the said action list is performed by the following steps: H3c1. Locating the object class instance which is assigned as the action performer for the action; H3c2. Signaling to the said action performer which action method is specified for the action; H3c3. If there are method data specified for the said method of the said located object class instance, the method data are passed to the said object class instance as well; H3C4. The said located object class instance carries out the said action method.

7. The method of claim 1 further comprising the step of: I. A context-data buffer which saves event parameter data such as mouse position in mouse movement events; every time an event is fired, before an action list is executed as an event handler, the said context-data buffer is filled with the said event parameter data; J. The said context-data buffer is available for the user to pick as the

“ “ “ “

method data in step D1c;

8. A method designed for object classes to dynamically change their event-action-list mapping at the runtime; any object classes may choose to support or not to support the said method; the said method has two parameters; the first parameter is the event identifier which identifies an event supported by the object class which is the owner of the said method; the second parameter is the action list class instance identifier which identifies an action list class instance;

9. The method of above claim further comprising the step of: K. At the runtime, when an object class instance is asked to perform the said method, the said object class instance uses the first parameter of the said method to locate its event; L. The said object class instance uses the second parameter of the said method to

See the rejection of claim 1 and the feature of dynamically changing or binding at runtime, Dietel - pages 419-420. Although, the feature is not specifically taught by Patel/Budd, it would have been obvious to a person having ordinary skill in the art at the time of the invention to utilize the feature in Patel/Budds system to enable decisions to be deferred until execution time. Also, the feature inherently provides for a choice of which method to support. For example, the method in the parent class is either supported if is not overwritten in a subclass or not supported if it is.

This claim is so unclear it can not be further treated on the merits. However, since it references a runtime feature, it is hereby rejected as claim 8.


locate the action list; M. The said object class instance rebuilds the event-action-list map using its event located in step K and the action list located in step L.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Chavis whose telephone number is (703) 305-9665. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703) 305-9662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jc  
September 30, 2004

  
JOHN CHAVIS  
PATENT EXAMINER  
ART UNIT 2124